
--ABSTRACT

There are provided microorganisms having a property of producing a lipid containing unsaturated fatty acids as constituent fatty acids and extracellularly secreting the produced lipid encapsulated in lipid vesicles, methods of screening said microorganisms, as well as methods of efficiently producing a fatty acid-containing lipid using said **B5** microorganisms. Furthermore, there are provided lipid vesicles encapsulating a lipid containing unsaturated fatty acids, and foods, cosmetics, and animal feeds comprising said lipid vesicles added thereto. Artificially treated microorganisms or microorganisms collected from nature are grown on a solid medium, and microbial strains that form lipid vesicles at the periphery of the colonies and/or microbial strains that, when cultured in a transparent liquid medium, make the culture liquid cloudy are selected. The microorganisms obtained are cultured, lipid-containing lipid vesicles secreted in the culture liquid, are separated from the culture liquid, and the lipid is separated and purified.--
